

A REDESCRIPTION OF *ICHTHYOTACES PTEROISICOLA*
SHIINO (CRUSTACEA: COPEPODA: PHILICHTHIIDAE)
FROM THE LIZARDFISH *SYNODUS VARIEGATUS*
LACÉPÈDE (SYNODONTIDAE)

Roger F. Cressey

Abstract.—In 1932 Shiino described a new parasitic copepod from the scorpionfish *Pterois lunulata*. This gall-producing parasite has not been reported since. The author recently collected another specimen from *Synodus variegatus* during his recent studies of Indo-West Pacific lizardfishes.

Parasitic copepods of the family Philichthiidae are characterized by their presence in the canals of the lateral line system of their hosts. The single female and male described below were recovered from a gall located on the right upper surface of the head behind the right eye of the host.

Ichthyotaces pteroisicola Shiino
Figs. 1-9

Ichthyotaces pteroisicola Shiino, 1932:417.

Material examined.—A single female and single male from a gall on the head of a specimen of *Synodus variegatus* (CAS 30617) from Viet Nam housed in the collections of the California Academy of Sciences (Fig. 1).

Description.—Female: Body form as in Fig. 2, about as wide as long (4mm). Ventral aspect with series of bulbous processes arranged symmetrically as in figure.

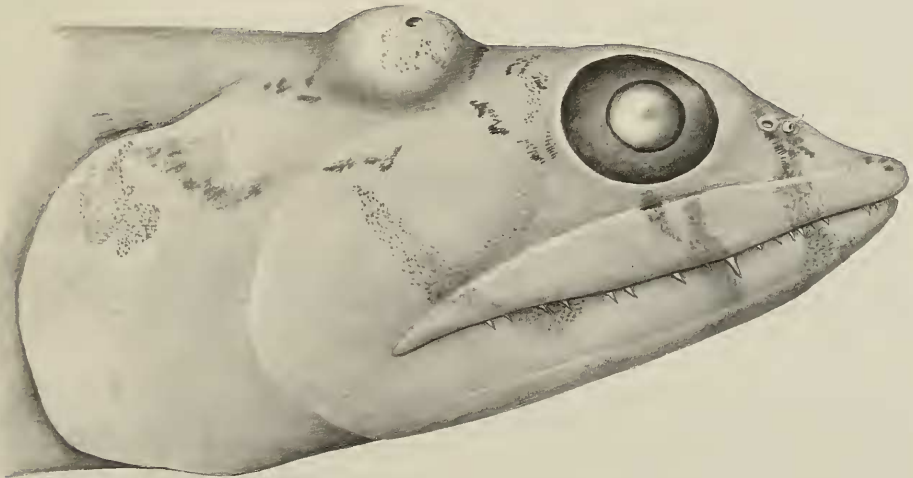
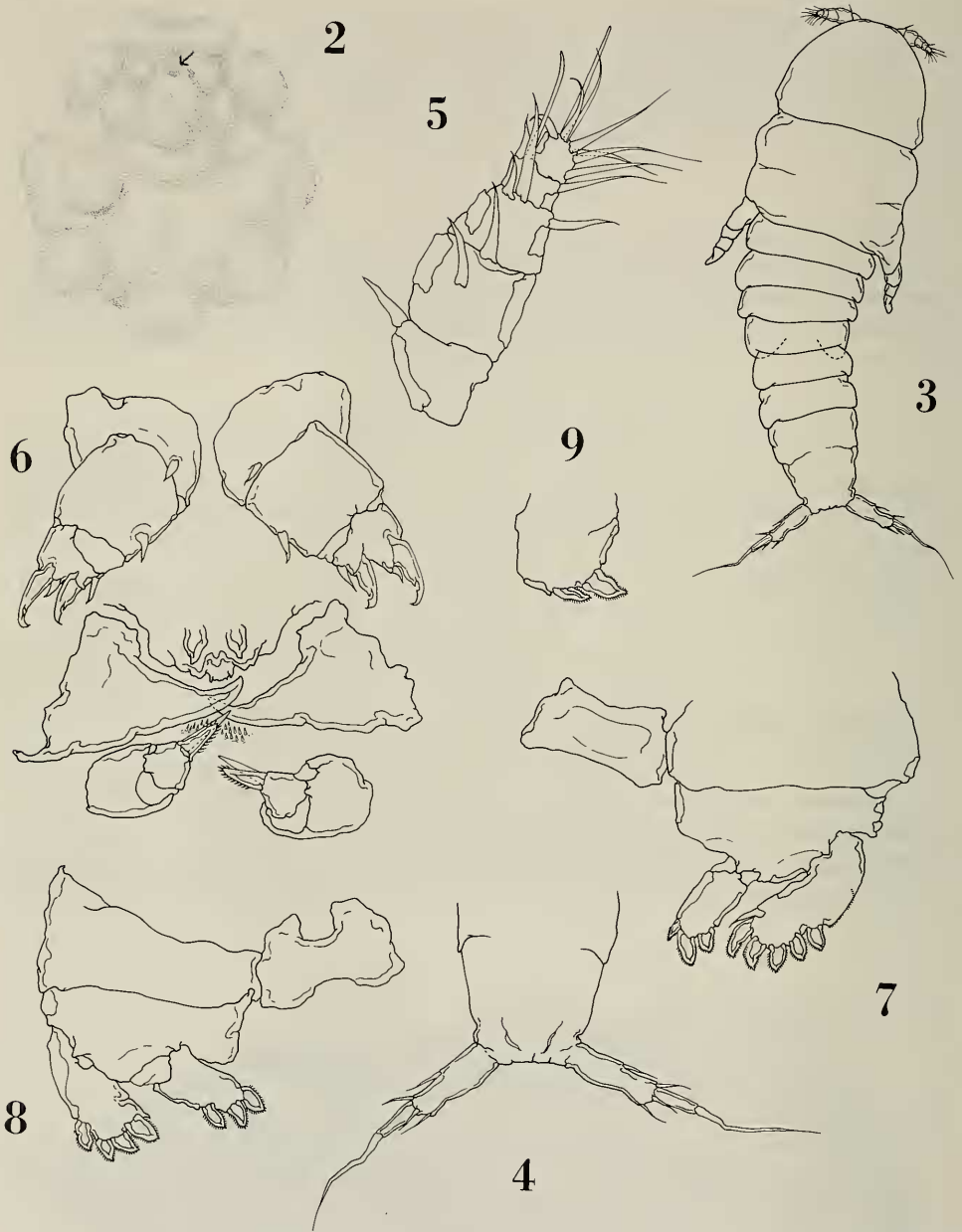


Fig. 1. *Synodus variegatus* Lacépède (CAS 30617) infested with *Ichthyotaces pteroisicola* Shiino.



Figs. 2-9. *Ichthyotaces pteroisicola*: 2, Female, ventral view; 3-9, Male: 3, Dorsal view; 4, Last abdominal segment and caudal rami, ventral; 5, First antenna; 6, Oral area; 7, Leg 1; 8, Leg 2; 9, Leg 3.

Oral area indicated by arrow on Fig. 2. (I was unable to dissect out the mouthparts from the single specimen as they are extremely small and difficult to see). No thoracic appendages could be found unless the bulbous processes represent them and the caudal ramus.

Male: Body form as in Fig. 3. Total length 896 μm , greatest width 251 μm , measured at widest part of free thoracic segments. Thoracic segments bearing legs 1 and 2 fused, bearing articulated process at each posterior corner. Thoracic segment bearing leg 3 free. Following 2 thoracic segments without appendages. Genital segment bilobed ventrally and about 3 times as wide as long. Abdomen 3- or 4-segmented (last segment partly divided). Caudal rami (Fig. 4) longer than wide ($83 \times 32 \mu\text{m}$) bearing 1 outer lateral seta, 3 small terminal-subterminal setae, and 1 longer, subdivided seta, all setae naked.

First antenna (Fig. 5) 5-segmented, segments bearing 1, 2, 3, 2, 7 setae respectively and aesthete on each of last 2 segments, all setae naked. Second antenna and oral area as in Fig. 6. Second antenna oriented towards oral area indicating possible feeding appendage rather than for attachment as in other groups of parasitic copepods. Labrum bearing 2 sclerotized processes similar to single process recently described as representing the labrum in *Colobomatus* by Cressey and Schotte (1983). Mandible represented by heavily sclerotized triangular process. First maxilla not found but possibly represented by 2 medial patches of spinules between mandible and second maxillae. Second maxilla bearing 2 terminal processes, largest bearing row of stout spinules along posterior border.

Leg 1 (Fig. 7) rami 1-segmented, exopod outer edge with 2 short rows of spinules as in figure, 5 outer to terminal, short, stubby fringed spines and inner naked spine/seta, endopod with 3 terminal fringed spines as in exopod. Leg 2 (Fig. 8) as in leg 1 except outer rows of spinules on exopod not seen, 1 less terminal spine, and no inner spine/seta. Leg 3 (Fig. 9) simple lobe bearing 2 terminal fringed spines.

Remarks.—This parasite is apparently rare as this is only the second reporting of it in over 50 years and seems especially so since the parasite causes the host to produce an obvious gall, not easily overlooked. During the course of my examinations of lizardfish (*Synodus*) for a revision of the Indo-West Pacific species I examined over 1000 fish. The infestation by this parasite on only one examined fish indicates its rarity. The previous record from the scorpionfish *Pterois* also indicates that it is not host-specific.

Acknowledgments

The line illustrations were done by Hillary B. Cressey. The halftone was done by Jack Schroeder.

Literature Cited

- Cressey, R. F., and M. Schotte. 1983. Three new species of *Colobomatus* (Copepoda: Phyllichthyidae) parasitic in the mandibular canals of haemulid fishes.—Proceedings of the Biological Society of Washington 96(2):189–201.
- Shiino, S. 1932. Ichthyotaces pteroisicola, n. gen. and n. sp. a copepod parasitic on the fish *Pterois lunulata* Temm. and Schl.—Annotationes Zoologicae Japonenses 13(4):417–433.

Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560.